

Ryobi Outdoor Products
550 N. 54th Street
Chandler, AZ 85226
800-345-8746

MATERIAL SAFETY DATA SHEET

Trade Name: RYOBI, RYAN, IDC
Product: 2 cycle 32:1 engine oil
Part Number: 147541, 147541r, 147543r, 180708r, 180719r
Manufacturer: CITGO Petroleum Corporation
Post Office Box 3758
Tulsa, Oklahoma 74102

Material Hazard Evaluation

(Per OSHA Hazard Communication
Standard (29 CFR Part 1910.1200)) (OHCS)

Health: Non-Hazardous (OHCS).

Precautionary Statement: CAUTION: Combustible liquid. Do not inhale vapors nor permit direct dermal contact.

HMIS Rating: Health 0 Flammability 2 Reactivity 0

1.0 Generic Composition / Components

<u>Components</u>	<u>CAS #</u>	<u>%</u>	<u>Hazard Data</u>
Refined Petroleum Oil(s)	64741-88-4 64742-01-4	70-90	Oral LD50(rat): > 15g/kg
Mineral Spirits	8052-41-3	< 20	Oral LDLo(hm): > 10ml Eye: Mild irritant Skin: Mild irritant
Ashless Dispersant and Anti-oxidant	Mixture	< 15	Eye and skin irritant
Coupling Agent	Mixture	< 1	Oral LD50(rat): 3.8 cc/kg Moderate eye irritant Slight skin irritant
Dye	Mixture	< 0.1	Skin: Irritant Vapors in high concentration are anesthetic.

Acute Exposure Symptoms

<i>Inhalation:</i>	Low risk of inhalation. In enclosed spaces or when hot, vapors may reach concentrations sufficient to cause drowsiness, dizziness, headache, nausea, or lung irritation. Mists above TLV may cause chemical pneumonitis.
<i>Dermal Contact:</i>	Mild irritant.
<i>Eye Contact:</i>	Mildly irritating.
<i>Ingestion:</i>	Toxicity is relatively low. However, of a Saybolt viscosity of about 446 (100°F), the risk of aspiration into the lungs is negligible. On ingestion of large quantities, slight GI discomfort, diarrhea, and headache may occur. Small doses may produce irritation and diarrhea.
<i>Injection:</i>	Subcutaneous or intramuscular injection should be considered as a medical emergency.

Chronic Exposure

Prolonged and/or frequent dermal contact may cause drying, cracking (dermatitis) or folliculitis. Repeated, excessive exposure to mists or fumes may induce pulmonary irritation or chronic bronchitis.

Other Special Effects

None expected.

Medical Conditions Aggravated by Exposure

None.

First Aid and Emergency Procedures for Acute Effect

<i>Inhalation:</i>	Remove to fresh air. Respiratory support, if necessary. Seek medical aid.
<i>Dermal:</i>	Wash with soap and water. Do not wear heavily contaminated clothing before laundering.
<i>Eyes:</i>	Flush with large volumes of water. Seek physician if any complications arise.
<i>Ingestion:</i>	Do not induce vomiting. Seek medical aid.
<i>Injection:</i>	Subcutaneous injection is a medical emergency. Seek medical aid immediately.

Notes to Physician: Following ingestion, at a Saybolt viscosity of about 446 SUS, (100°F), the risk of aspiration into the lungs is negligible. Removal by euffed tube lavage may be considered. Aspirated material may cause chemical pneumonitis or lipoid pneumonia. Subcutaneous or intramuscular injection requires prompt surgical debridement. If not familiar with technique, seek skilled advice.

2.0 Physical Data

Physical Hazard Classification (Per 29 CFR Part 1910.1200)

Yes	Combustible	No	Flammable	No	Pyrophoric
No	Compressed Gas	No	Organic Peroxide	No	Reactivity
No	Explosive	No	Oxidizer	Yes	Stable

Boiling Point, 760 mmHg, °C(°F): > 149(> 300)
 Specific Gravity (60/60°F) (H₂O = 1): 0.88
 Vapor Density (Air = 1): > 1
 % Volatiles by Volume: < 20
 Melting Point, °C(°F): NA
 Vapor Pressure, mmHg (25°C): ND
 Solubility in H₂O, % by Weight: Negligible
 Evaporation Rate (Butyl Acetate = 1): < 1
 pH of Undiluted Product: ND
 Appearance and Odor: Purple liquid, slight odor of petroleum distillate.

3.0 Fire and Explosion Data

Flash Point, COC, °C(°F)	121(250)
Flash Point, PMC, °C(°F)	79(174)
Fire Point, COC, °C(°F)	154(309)
NEPA Rating	Health: 0 Flammability: 2 Reactivity: 0
Flammable Limits (% by volume in air)	Lower: ND Upper: ND
Extinguishing Media	CO ₂ , dry chemical, foam, water fog
Special Fire Fighting Procedure	None.
Unusual Fire or Explosion Hazard	Water may cause frothing.

4.0 Reactivity Data

Stability: Stable.

Conditions Contributing to Instability: Excessive heat.

Incompatibility: Strong oxidants.

Hazardous Decomposition Products: CO₂ (CO under incomplete combustion)
(thermal, unless otherwise specified)

Conditions Contributing to Hazardous Polymerization: None.

5.0 Spill or Leak Procedures

Procedures if Material is Spilled:

- Remove sources of heat or ignition, provide adequate ventilation, contain leak.
- *Small Spills:* Absorb with suitable material such as rags, straw or sand.
- *Large Spills:* Contain spill in earthen dikes for later recovery.
- Report spills as required to appropriate authorities.

Waste Disposal:

- It is the responsibility of the user to determine if the material is a hazardous waste at the time of disposal.
- Check before disposing to be sure you are in compliance with all applicable laws and regulations.
- Chemtrec/RCRA Emergency Hotline Number: 800-424-9346.

Protective Measures During Repair and Maintenance of Contaminated Equipment:

- Refer to Section VII - Special Protection Information.
- Avoid prolonged contact with oil.
- Wash exposed skin thoroughly with soap and water.
- Remove soiled clothing.
- Use polymer gloves if extended, direct contact is expected.

6.0 Health Hazard Data

Health Hazard Classification

(Per 29 CFR Part 1910.1200)

No	Carcinogen	No	Corrosive
No	Animal Carcinogen	No	Irritant
No	Suspect Carcinogen	No	Sensitizer
No	Mutagen	No	Teratogen
No	Highly Toxic	No	Target Organ
No	Toxic		

Product listed as Carcinogen or Potential Carcinogen by:

NTP No IARC No OSHA No Other No

Toxicity Summary: Slightly to moderately toxic. Lethal dose for 150 lb. human adult may be 10 to 250 ml.

Major Route(s) of Entry: Inhalation of incidental mists or vapors, slight dermal absorbability.

7.0 Special Protection Information

Ventilation Requirements:

Use in well ventilated area. In confined space, mechanical ventilation may be required to keep levels of certain components below mandated standards, as evaluated by designated personnel.

Permitted Air Threshold Concentration:

Mineral	TWA:	5mg/m ³	5 mg/m ³
Oil Mist	STEL:	10mg/m ³	ND
	Cell., Peak:	ND	ND

Specific Personal Protective Equipment:

Respiratory:

Normally none required. If high vapor or mist concentrations expected, use respirator approved for organic vapors and mists.

Eyes:

Safety goggles, or chemical splash goggles if splashing is anticipated.

Dermal:

Oil impervious gloves if frequent or prolonged contact is expected.

Other Clothing or Equipment:

Wear body-covering work clothes to avoid prolonged or repeated exposure. Launder soiled work clothes before reuse.

8.0 Transportation and Special Precautions

Storage: Store below 150°F. Do not apply high heat or flame to container. Keep separate from strong oxidizing agents.

Caution: Empty containers may contain product residue which could include flammable or explosive vapors.

Consult appropriate Federal, State and Local authorities before reusing, reconditioning, reclaiming, recycling or disposing of empty containers and/or waste residues of this product.

DOT Information

Proper Shipping Name:	Petroleum Lubricating Oil
Hazard Class:	Combustible Liquid
Hazard Identification Number:	NA 1270
Placard:	Combustible Liquid
Coast Guard, CHRIS Code:	OMT
Compatibility Category:	Group 33

9.0 Environmental Data

Product Name: IDC Trimmer Oil
Commodity Code: 25-487

SARA TITLE III

Section 313 - Toxic Chemicals

This product does not contain toxic chemicals of Section 313 of Title III of Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR Part 372.

<u>Components</u>	<u>CAS#</u>	<u>%</u>
None	NA	NA

Section 311 - Hazard Categories

<u>No</u> Not Applicable	<u>No</u> Fire Hazard
<u>No</u> Acute (Immediate Health Hazard)	<u>No</u> Sudden Release of Pressure Hazard
<u>No</u> Chronic (Delayed Health Hazard)	<u>No</u> Reactive Hazard

Section 302(A) - Extremely Hazardous Substances

(RQ = Reportable Quantity)
(TPQ = Threshold Planning Quantity)

This product does not contain Extremely Hazardous Substances of Section 302(A).

<u>Component</u>	<u>CAS#</u>	<u>%</u>	<u>RQ lbs.</u>	<u>TPQ lbs.</u>
None				

Clean Water Act

Under Section 311 (b) (4) of the Clean Water Act, discharges of crude oil and petroleum products in any kind or form to surface waters must be immediately reported to the National Response Center: 800-424-8802.

Comprehensive Environmental Response, Compensation & Liability Act (CERCLA) - Section 102 Hazardous Substances

<u>Component</u>	<u>CAS#</u>	<u>%</u>	<u>RQ lbs.</u>
None			

Petroleum and petroleum fractions are excluded from the list of CERCLA hazardous substances by Section 101(14) of CERCLA.

New Jersey Worker & Community Right-to-Know Act

Petroleum Oil

10.0 Labeling

CAUTION

*Combustible liquid.
Contains petroleum distillates.
Keep away from heat and flame.*

*Harmful or fatal if swallowed.
Do not induce vomiting.
Call a physician immediately.*

Keep out of reach of children.

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